ABSTRACT

The construction industry in Singapore is always associated with hazardous working conditions. Since 1994, fatalities and accidents in the construction industry have continued unabated despite more stringent legislation and regulation, as well as numerous management driven initiatives. There is a need to develop effective performance measures and metrics to achieve a comprehensive safety system. To date, most safety performance measurement systems have been preoccupied with the negative consequence of site accidents rather than pro-active prevention strategies. Until recently, very few studies have been done on adopting a “positive” approach in measuring safety performance. This research has identified the inadequacy in using the accident rates, or other similar statistically based “negative” measures. The study has also introduced the concept of using The Balanced Scorecard tool in measuring safety performance in construction. The study examined the Management Perspective of The Balanced Scorecard and discussed the various safety management goals that construction organisations should play to enhance safety culture on site.

By means of conducting a survey on a sample of 31 projects in the construction industry, the 6 broad categories of safety management goals investigated are “Improving productivity”, “Enhancing business image”, “Having a committed top management”, “Reducing cost related to accidents”, “Building a highly competent workforce” and “Selecting more safety-aware subcontractors”.

A One-Sample T-Test is performed to determine the statistical significance of each category. The test also reported on the most to the least significant safety management
goals in improving safety culture on site. The 4 significant safety management goals, in order of the most critical category to the least, are “Having a committed top management”, “Selecting more safety-aware subcontractors”, “Build highly competent workforce” and “Reducing cost related to accidents”. These 4 significant safety management goals have an impact on improving the safety culture on site.